

AMENDMENTS

This listing of claims will replace all prior versions, and listings, of claims in the application:

1-5. (Canceled)

6. (Previously presented) A device for maintaining viable eucaryotic cells, comprising:

(a) woven fabric forming an annular compartment, having an annular space, wherein the fabric comprises a biodegradable polymeric fiber and a non-biodegradable material,

(b) at least two additional compartments, adjacent and coaxial to said annular space, where each adjacent compartment contains a liquid, and

(c) an integral aeration supply for the annular space.

7. (Previously presented) The device of claim 6, wherein the non-biodegradable material comprises polyester.

8-9. (Canceled)

10. (Previously presented) A bioreactor, comprising:

(a) a housing having an inner side comprising: a gas introduction means integral to the housing; and a gas expiration means integral to the housing;

(b) an array of a plurality of modules of textile vasculatures, residing within the housing, each module comprising:

(i) a plurality of coaxial textile vasculatures, each having an inner side and an outer side, including an innermost textile vasculature and an outermost textile vasculature;

(ii) a plurality of compartments, comprising: a first compartment defined by the inner side of the innermost textile vasculature; and

(iii) at least one additional compartment defined by a respective annular space between adjacent fibers of the plurality of coaxial textile vasculatures; and

(c) an outermost compartment defined by a space within the inner side of the housing which is not occupied by the plurality of modules,

wherein the textile vasculature comprises a biodegradable polymeric fiber and a non-biodegradable material.

11. (Previously presented) The bioreactor of claim 10, wherein the non-biodegradable material comprises polyester.

12. (Previously presented) A serially-linked bioreactor, comprising a plurality of bioreactor subunits, each bioreactor subunit comprising:

(a) a housing having an inner side and an outer side, said inner side comprising: a gas introduction means integral to the housing; and a gas expiration means integral to the housing;

(b) an array of a plurality of modules of textile vasculatures, residing within the housing, each module comprising:

(i) a plurality of coaxial textile vasculatures, each having an inner side and an outer side, including an innermost textile vasculature and an outermost textile vasculature;

(ii) a plurality of compartments, comprising: a first compartment defined by the inner side of the innermost textile vasculature; and at least one additional

compartment defined by a respective annular space between adjacent vasculatures of the plurality of coaxial textile vasculatures; and

(c) an outermost compartment defined by a space within the inner side of the housing which is not occupied by the plurality of modules; and

(d) at least one compartment of one bioreactor subunit linked serially to at least one compartment of at least one other bioreactor subunit,

wherein the textile vasculature comprises a biodegradable polymeric fiber and a non-biodegradable material.

13. (Previously presented) A bioreactor, comprising:

a hollow structure defined in 3-dimensional space by a woven fabric comprising a biodegradable polymeric fiber and a non-biodegradable material.

14. (Original) A method of cell culture, comprising:

introducing viable cells into a compartment of the bioreactor of claim 10, and passing nutrient medium through coaxially adjacent textile vasculatures.

15. (Previously presented) The device of claim 6, wherein the biodegradable material comprises polylactide.